

1996 Missouri Pregnancy Nutrition Surveillance System

Executive Summary

Maternal health behaviors, including nutrition practices, contribute to pregnancy outcome and maternal and infant well-being. The leading causes of low birthweight, infant morbidity, and infant mortality are closely associated with behavioral choices. Nutrition-related factors that affect maternal and infant health include maternal prepregnancy weight, weight gain during pregnancy, anemia, and infant-feeding method. Other influential behavioral factors include alcohol use, tobacco use, and time of entry to prenatal care. Participation in food assistance programs, such as the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC program) has a positive effect on pregnancy outcome. In addition, birthweight is affected by many sociodemographic factors, including maternal race or ethnicity, socioeconomic status, age, and marital status.

Few national data are continuously collected on the distribution of these factors among pregnant women in the general population. The CDC Pregnancy Nutrition Surveillance System (PNSS) has monitored behavioral and nutritional risk factors among low-income pregnant women enrolled in public health programs in participating states since 1979. This report presents 1996 data for Missouri. In 1996, all clinics in Missouri participated in the surveillance system and contributed over 43,299 records. Data were complete for many data elements, but incomplete for others (such as entry into medical care, smoking, alcohol use, and infant-feeding practices). Caution is recommended in interpreting the results for these data elements.

In the 1996 Missouri PNSS, 27.8% of mothers were teenagers. About 80% of mothers enrolled in the WIC program while pregnant; the proportion entering the program in the first trimester was 36.5%. Prepregnancy body mass index (BMI) was assessed for each woman; the prevalence of overweight (BMI>26.0) was 36.6%. About 17% of women were underweight when they became pregnant, and 23.9% gained less weight during pregnancy than is recommended. Both of these factors were associated with risk for having a low birthweight infant.

In 1996, 8.5%, 14.7%, and 36.0% of women had anemia in the first, second, and third trimesters, respectively. These findings may indicate the need for improved iron nutrition among low-income women. The proportion of women smoked during pregnancy was 26.9%. Rates of maternal behavioral and nutritional risk factors varied widely by region. In 1996, 9.1% of infants born to women in the Missouri PNSS were low birthweight (<2,500 g) and 8.2% were high birthweight (>4,000 g). About 40% of infants were ever breastfed.

A comparison of the Missouri PNSS data with the year 2000 national health objectives shows that the objective for decreasing the incidence of very low birthweight babies has nearly been met in the PNSS population. However, objectives pertaining to teenage pregnancy, prepregnancy overweight among women aged 20 years or older, minimum

recommended weight gain during pregnancy, prevention of anemia among black women in the third trimester, smoking cessation during pregnancy, decreased incidence of low birthweight, and increased breastfeeding have not been achieved. To meet the nation's objectives for maternal and child nutrition, concerted efforts are needed to convey nutrition and health promotion messages and to strengthen delivery of support services.